

## THE FIRST WORLD WAR, SCIENTIFIC THOUGHT, AND CHINESE POLITICS IN THE 1920s

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*Abstract: This article researches the effect of The First World War (WWI) on the scientific thought and Chinese political situation in the 1920s, and also analyzes the ways, levels and inner relationship from the perspective of historical data and facts. It considers that WWI separated Science from democracy, and weakened scientific thought. Moreover, from the perspective of the history of ideas, it indicates that WWI had an effect, direct or indirect, on the Chinese political situation in the 1920s, the dispute and cooperation between the different parties and the emergence of workers' movement, and it had close relationship with populism that is anti-science.<sup>1</sup>*

### I

The WWI isn't only a turning point in modern cultural society of human development, but also is a milestone of the modernity process of Chinese society, culture and politics. Especially, it's critique of scientism. How to master the advanced science and technology of the west to become rich (求富) and powerful (自強) was a dream of all Chinese social circles since the late-Qing Dynasty. They considered that it was the advanced science and technology that had made the west so rich and powerful. Of course, industrialization and the modernity movement represented by the Westernization Movement had become the most important means for modern China to master modern western science and technology.

At the beginning, western science and technology was unwelcome in China. It was even satirized by conservative chancellors as clever contrivance and specious skills which were useless for social regulation.<sup>2</sup> "In China, imported goods are useless and nothing but so-called specious skills only", "Steamboat is clumsy boat and cannon is dull weapon".<sup>3</sup>

But in fact, this backward prejudice couldn't solve the crisis in early globalization process for the empire. The Second Opium War (1856-1960) and the Sino-Japanese War of 1894 gradually made the Chinese to know the excellence of western science and technology. When the backward Chinese cold arms met with the

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<sup>2</sup> 同治六年五月二十二日楊廷熙條[A].中國史學會：洋務運動（二）[M].上海：上海書店出版社.2000.p43.

<sup>3</sup> 王闖運：湘綺樓詩文集·第二卷[M].長沙：嶽麓書社.2008.p. 42.

modern western weapons, its odds disappeared completely. In this situation, some officer said, “(western) weapons are heavy and skillful, and they can beat Chinese weapon hollow.”<sup>4</sup> And another officer said, “If someone can read characters, and teaches others, to pick up the technique of steamboat controlling and weaponry. It may be helpful for the improving of China to be powerful.”<sup>5</sup>

By this opportunity, some modern colleges such as *Peking Language School* (京師同文館, 1862) and *Mawei Ship College* (馬尾船政學堂, 1866) that taught western languages and skills appeared in a national wide scale, they had trained many modern intellectuals who had modern scientific literacy. And foreign concession increased and modern science technology continued to permeate and change the daily living in China. It formed the Sinicized scientism. It included studying abroad, science fiction and science works translating and publishing, science practice become popular and advocating science is all powerful.

Scientism is an inevitable outcome of modern scientific thought crashing with traditional Chinese culture. From the viewpoint of intellectual history, the nature of scientism is a kind of belief. Anyone who believes in scientism believes that science is all powerful and could solve all problems. Before and since the Revolution of 1911, this ideological trend had existed and became stronger with the time. At that time, scientific thought was a holy word in China. “Since the *Reform Movement of 1898* (戊戌變法) nobody dares to blacken science openly.”<sup>6</sup>

This kind of scientism lasted since the WWI broke out. As the WWI in human history, it made human beings in times of scientific revolution knows that modern science and globalization brings not only convenience but also suffering. Some discerning Chinese scholars knew this problem deeply, such as *Yan Fu* (嚴復), a famous writer who said, “The WWI is an evil war, why these countries sent punitive campaigns against each other? Is modern science only a kind of weapon?” He even said, “Because of modern science, many people were killed in the WWI.”<sup>7</sup>

The WWI was a worldwide plague from which human beings entered a globalized pattern, and it was too violent to shock this world. Modern industry and electric power were used for advanced weapons in this war. Numerous people fell at the Battle of Verdun, Somme, Cambrai and so on. To the west, science didn't only bring convenience but also suffering to human. How to reflect on the negative influence of modern science? This became a mainstream of the western ideological field in the beginning of the 20<sup>th</sup> century.

Some western philosophers such as Henri Bergson, Irving Babbitt, Bertrand Russell, John Dewey and Rudolf Eucken perceptively found that science had a harmful effect on human beings and began to reflect on future human development from the perspective of Humanism including human nature, morality and religion.

<sup>4</sup> 齊思和等主編：籌辦夷務始末（道光朝）·卷三十五[M].北京：中華書局.1964.p1300

<sup>5</sup> 李鴻章：請設外國語言文字學館折（同治二年二月）[A]. 安樹芬、彭詩琅主編：中華教育通史·第八卷[M].北京：京華出版社.2003.p1827

<sup>6</sup> 胡適：科學與人生觀[M].上海：亞東圖書館.1923.p2-3

<sup>7</sup> 嚴復：嚴復集·第二冊[M].北京：中華書局.1986.p430-404

Humanism became an important weapon to fight against scientism and was more popular during the 1910-20s in western society, and it also had a positive influence on the Frankfurt School.

During the New Culture movement, Science was called *Mr. Sci* (賽先生) in China which guided the Chinese enlightenment. At the same time, democracy also played a very important role, and it was called *Mr. De*. (德先生) Viewed from a philosophical perspective, democracy could balance the technological elements of modern science.

Here, I want to define the concepts of science and democracy. Science includes scientific technology and its derivatives only, but not scientific methods, theories and the broad science system. Of course, democracy likewise isn't the broad concept of western politics but a view that is continued to be defined, explained and corrected in the Chinese political field since the Revolution of 1911. There was another explanation for democracy in the Chinese ideological field at that time.

From the late-Qing Dynasty to the 1920s, science in China meant such technology denied traditional Chinese science and technology. Although the concept of democracy was imported, it implied people's need. It had many aspects in common with traditional Chinese political views such as "The people is more important than the king" and "The people is the foundation of a country". Compared with science, democracy was localized and considered interior, and was more easily accepted by the people, even though it had led to cultural conservatism and populism.

This strengthened the influence of democracy on the Chinese ideological field but the scientific thought had been weakened. Many articles were published in the new magazines such as *Orient Journal* (東方雜誌), *New Tide* (新潮) and *New Youth* (新青年). Arthur Ponsonby's *Machine and Life* discusses how machine hurts human nature. And Liang Qichao (梁啟超) also said, "Somebody wanted scientific thought to bring about an ideal state, but scientific thought brought a hell to us, we had great harvest in the scientific field, but also had great distresses in our world."<sup>8</sup> which was in his work *Travel in Europe* published in 1919.

After Liang, many famous scholars like Zhang Junmai (張君勱) 、Liang Shumin (梁漱溟) and Du Yaquan (杜亞泉) all wrote articles for the critique of "the omnipotence of science,"<sup>9</sup> People must reflect on the problems that were brought about by scientism. In fact, it gave pause to Chinese intellectuals who had previously embraced western scientific thought whole-heartedly. However, Chinese intellectuals swung to another extreme and began to devalue scientific thought altogether, which in turn weakened the Chinese modern enlightenment. According to the critique of science, democracy had been more important to the Chinese ideological field, it improved democracy and made it more popular objectively.

<sup>8</sup> 梁啟超：歐遊心影錄·新大陸遊記[M].北京：東方出版社.2006.p14

<sup>9</sup> See some works as 張君勱《科學與人生觀》(載《清華週刊》總第272期，1923年3月)、梁漱溟《東西文化及其哲學》(上海商務印書館.1921)與杜亞泉《迷亂之現代人心》(《東方雜誌》15卷4號，1918.4)

A historical fact shouldn't be ignored: the effect of modern scientific thought didn't start since the WWI but the Sino-Japanese War of 1894. Before this war, China had bought the best warship from the west, but was still defeated by Japan whose weapon was much less than Chinese. Since this time, reformation and modernization swept across the country. Although the Reform Movement of 1898 was a failure, democracy never disappeared. From the Reform Movement of 1898 to the New Culture Movement, the concept of democracy always looked for its position in the Chinese intellectual circle, and found the inner power for the Chinese social development.

From the popularity of scientism to the appearance of the dualism of "science/democracy" and last to the query and partial negation about Scientism, all these reflected the complexity and the immature form of the modern Chinese ideological circle as affected by globalization. Of course, it affected the political situation of the 1920s.

## II

Around of the New Culture Movement, many Chinese scholars had great enthusiasm about science and could realize that the negative effect of science was that it wasn't the main stream. Of course, science was still accepted by many. And many people who showed doubt on science were just swimming with the tide.

The competition faced by the scientific thought was weakening. In 1920s, a famous contention happened in the Chinese ideological field, which was between different supporters of science and metaphysics, with one side advocating that metaphysics could balance science. Undoubtedly, this was an intemperate and reactionary view. When scientific thought met anti-science, scientific thought had the upper hand. But we shouldn't deny the values of this contention in reflecting modern scientific thought and philosophy, and it demonstrated that Chinese intellects were discussing a question that surpassed the traditional academic history in that it was based on modern scientific thought and philosophy. Of course, it wasn't only an expression of opposite cultures but also a contribution to the world philosophy.<sup>10</sup> From the viewpoint of the modernity process in culture and politics, scientific thought became to weaken in the 1920s in a special historical background. It was because the criticism of scientific thought and the doubting about it had wakened up the conservative's enthusiasm, the consequence of which was that democracy went to part from scientific thought and be combined with the Chinese political situation after the WWI, and it even affected the Chinese politics in the 1920s. It's worthy of reflection.

The 1920s was very important in modern Chinese political history. On the one hand, it was a transition period lasting from the Peking Nationalist Government ( controlled by Northern warlords ) to the Nanking Nationalist Government

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<sup>10</sup> Charlotte Furth: *Ting Wen-chiang: Science and China's New Culture*. Cambridge: Harvard University Press, 2013. p. 118.

(controlled by Kuomintang). On the other hand, it also was a turning period that went from the Kuomintang-Communist co-operation period to Kuomintang's break away with the Communist Party. This period show not only the complicated aspects of modern Chinese politics, but also the multifarious characters of the Chinese culture, thought and academy at that time. The academic field called this period "the Post-May forth period". Based on different theories, scholars actively discussed about different issues and formed a lively cultural landscape since the late of late-Qing Dynasty.

There are two features in the Chinese politics during this period, one being the different parties interacting between cooperation and confrontation, and the other, the emergence of the workers' movements. The social ideological trend had a close interaction with the political changes in the process of modernity in the Chinese society. It's very valuable that there are researches on Chinese ideology changes and the Chinese politics as affected by the WWI in this situation.

First is cooperation and confrontation among different parties that were active on the Chinese political stage, which was a feature of the Chinese politics in the 1920s. Chinese politics of 1920s were affected by skeptical scientism and scientism indirectly and together, but because the WWI, relationship between both of them became more heated. One of the most important effects was that WWI did not brought about the critique on the capitalist system and the industrial culture only, but also the reform to modern society; Moreover, it even triggered the spread of anarchism, social democracy, Guild Socialism, Fabianism and Marxism in China.<sup>11</sup>

Since the late of late-Qing Dynasty, western ideological trends had been introduced by Chinese intellectuals wholesale and they included politics, science and culture. According to them, "Translation is the most important matter". But, Chinese intellectuals came to see the problems that existed in the western society, especially the fact that human race was hurt by modern scientific thought and the maladjustment was the crash between it and the traditional Chinese culture. In this condition, Chinese and west intellectuals thought about the same problem: how to serve the state governance by reforming the social system and strengthening the citizens' consciousness of subjectivity. But the enlightenment was another duty for China.

During this period, many western social ideological trends were pouring into China. A number of Chinese scholars didn't only research and translate them, but also establish political parties (or organizations) for political practice. At that time, besides the Kuomintang and the Communist Party, the China Youth Party and the Construction Research Association were also influential but split internally.

The reason for the split was on the way to reform the Chinese politics. Its root was how to realize the western thought and scientific thought. For example, *Zhang Dongsun* (張東蓀), editor of *Liberation and Creation*, said, "Go back to Kant from Marx". He didn't only doubt the western science, but also its philosophy. And *Yan*

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<sup>11</sup> Christina K. Gilmartin : *Engendering the Chinese Revolution: Radical Women, Communist Politics, and Mass Movements in the 1920s*. London: University of California Press. 1995. p. 94.

*Yangchu* (晏陽初) and *Liang Shumin* appealed "rural construction" and considered it as the beginning of modernity. *Chen Duxiu* (陳獨秀) and *Zhang Shenfu* (張申府) actively critiqued the industrial culture and the modern economic system, and introduced Marxism into China, it deeply affected the Left-wing communist movement in China in the future.

In these years, some scholars researched the internal split of the Kuomintang and the Communist Party from the viewpoint of Sino-Soviet relations and the workers' movement. But there is an important historical fact: as a victory county, China did not gained any actual benefits after the WWI, Japan inherited the control prerogative of Jiaozhou Bay (膠州灣) from Germany, and this was contributing to the outbreak of the May forth Movement. It may also be a direct cause to the fact that Chinese intellectuals had lost confidence in the west. Of course, there are some historical relationships among the split of the Kuomintang and the Communist Party, the division in the Chinese ideological field and the interaction in different political parties in the 1920s.

Second is the emergence of the workers' movements. The 1920s was the decade that had the most numbers of strikes since the Opium War. Such as the "Feb. 7<sup>th</sup> strike" in 1923, the "Canton-Hong Kong Strike" in 1925, the "Anyuan Railway workers' and colliers' strike" and the "Hong Kong Seaman Strike" in 1922 and the "Shanghai Anti-Japanese strike" in 1925 and so on. These were not only simple labor disputes but important affairs that changed the development process of the modern Chinese history, creating important significance in the Chinese history. Some scholars thought that all the strikes were started by such workers' movement leaders as *Peng Pai* (彭湃)、*Deng Zhongxia* (鄧中夏)、*Liu Shaoqi* (劉少奇) and *Li Lisan* (李立三), all members of the Communist Party. But from a logical point of view, it had a close relationship with the division in the field of Chinese ideology, an influence of the WWI.

No doubt, the WWI and the establishment of the Soviet Union gave the Capitalist world a hard hit. With the laws of the capitalist society, the 1920-1921 economic crises engulfed the entire capitalist world. In China, after the division of the Chinese ideology field, governors and intellectuals did not idolize the western culture, society and science, but enlightened people, developed industry and constructed the rural areas. From "save the nation by science" and "save the nation by education" to "save the nation by industry" (實業救國) in the 1920s, Chinese social elites had no other choices. This social ideology was changed by the WWI.

In this situation, the development of Chinese national industry was slow. For example, after 1915, industry in China had changed from unfavorable balance of trade to favorable. In 1920s, the total of private property (included tobacco, textile and flour industry) was 0.58 billion dollar; if nationalized industry and foreign-owned enterprises were added, the number could be much bigger. At the same time, the Western Left-wing ideology trends were introduced into China, and it also was a

cause of the emergence of workers' movements.<sup>12</sup>

### III

Above all, the WWI did not only weaken the influence of scientific thought, but also had a lot to do with Chinese politics in the 1920s, which was characterized by the dispute and cooperation between the different parties and the emergence of workers' movement. But in a broad sense, the WWI also developed Chinese populism that confronted the modern scientific thought. It was combined with parties' disputes and workers' movement and improved the Left-wing communist movement in China.

In 1920s, some Chinese scholars explained democracy as populism, because of "the doubt on science" and "anti-scientism". Some populists wanted to reform the society to build a fair social order. It inherited enlighten sprite of the May 4<sup>th</sup> in critical way. On one hand, populists advisedly evaded and ignored science and made it equal to the western culture. They made an opposition between "populism/elite" that was based on "local/abroad" and even made up a few special concepts such as *populace* (平民) and *plebeian* (民眾) that represented *most people* but were based on populism. On the other hand, populists adapted from the enlightenment thought and tried to separate the context of the western politics, science and culture, and they replaced people's identity with the national identity, which meant that national independence was equal to social enlightenment.

After the WWI, Chinese populism took on the appearance of nationalism, and attracted some enlightened intellectuals to join. Left-wing activists such as *Lu Xun* (鲁迅) and *Guo Moruo* (郭沫若), members of the "Rural Construction" such as *Liang Shuming*, *Tao Xingzhi* (陶行知) and *Huang Yanpei* (黄炎培), democratic socialists such as *Zhang Ziping* and *Deng Yanda* (鄧演達), and anarchists as *Wu Zhihui* (吳稚暉) and *Ba Jin* (巴金), were all affected by populism more or less, and the word of populace was focused on widely. In March, 1920, the "Populace Education Lecturer's Group" was established in Peking University.

This Special context was a hotbed for Marxism to be communicated by Left-wing scholars such as *Mao Zedong* (毛澤東) and *Li Dazhao* (李大釗). They made the concept of populace equal to that of people in their political propaganda. And they called their opponents as "treacherous agents who work for foreigners".<sup>13</sup> And they established the Communist Party in China that had become the most important mover of the Left-wing communism in China.

Now it looks as if the WWI had made communism popular in China and that had its historical reason. But Chinese intellectuals did not find the relationship between them at that time. Because the scientific thought had become weakened in the 1920s, some scholars mystify this issue. For example, *Yan Fu* explained it from astrology:

<sup>12</sup> Takeshi Hamashita: *Trade and Finance in Late Imperial China: Maritime Customs and Open Port Market Zones*. Honolulu: University of Hawaii Press. 2009 .p. 70.

<sup>13</sup> Maurice J. Meisner: *Maurice Meisner, Marxism, Maoism and Utopianism*. Madison: University of Wisconsin Press.1982. p.72.

*In the 1<sup>st</sup> of June, a new star appeared in the milk way, it was bright...The hard war lasted for four years, more than 30 billion people were killed or hurt. Missionaries said the world was coming to an end by their theories, and the Savior will be revivification, people wanted millennium. Really? The rule of space is far from us, but the earth and other 7 planets consist in the solar system, certainly they had relation to each other. When Halley's Comet passed by the earth, communism was popular in the world and the WWI broke out. Did these affairs relate to the Halley's Comet ?<sup>14</sup>*

Yan Fu's view was ridiculous to the modern mind, but it showed that scientific thought was desolate more or less at that time. "Science is democracy's vassal" was then commonly approved by Chinese politicians. The Chinese enlightenment movement had to be stopped, science was separated from democracy, and the communism movement was developed by populism until now.

At this time, when we reflect on the Chinese political ideology of the 1920s, we can still find that democracy at that time had not yet been combined closely with science. Democracy had been a tool for effecting, instigating and wooing people from different parties (such as *Going to the people* in 1930 and *Populace Art Movement*). Scientific technology was not only limited in campuses or institutes for discussion, but also improved industry and commerce development and increased the number of working-class rapidly. Yet, all of these were based on the division of scientific thought and democracy. Science did not bring enlightenment into the early democracy movement. It instead made populism grow vigorously; it prevented the development of democracy in China. From an historical point of view, WWI was a result of globalization, and it was also the first world war of human beings. China, as a country which had just ended its feudal time, its ideology, culture and politics were affected in a complicated way by this war. Of course, this is a valuable issue for future research.

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<sup>14</sup> 黃浚：花隨人聖庵撫憶[M].北京：中華書局.2008.p98